ABSTRACT

[0085] An apparatus comprising a vehicle adapted to move across a surface and responsive to an operator. A head assembly connected to a support on the vehicle is adapted to carry a device for engaging the surface. An actuator on the vehicle raises and lowers the support relative to the surface. position control responsive to operator input indicates a position of the head assembly relative to the support. A controller responsive to the position control selectively actuates the actuator to maintain the head assembly in the position of the head assembly is obtained, the relative engagement between the head assembly and surface is controlled and the treatment of the surface by the head assembly is controlled. Position control may be used in combination with torque control of motors driving brushes for engaging the surface. Position control may also be used in combination with a pressure control measuring the pressure of the head assembly on the surface.